

CLAIMS

1. A nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO: 1.

5 2. A nucleic acid molecule comprising the coding region of the nucleotide sequence of SEQ ID NO: 1.

Sub
a7
3. A DNA that specifically hybridizes to the nucleic acid molecule of claim 1 or 2 and that is at least 15 nucleotides long.

10 4. A method for detecting the nucleic acid molecule of claim 1, wherein said method uses the DNA of claim 3.

5. A method for testing for an allergic disease, said method comprising the steps of:

(a) preparing T cells from a subject,

15 (b) preparing an RNA sample from said T cells,

(c) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled, and

20 (d) measuring the amount of RNA that is derived from said subject and that hybridizes with said DNA and comparing said amount with a control (normal group).

6. A method for testing for an allergic disease, said method comprising the steps of:

(a) preparing T cells from a subject,

(b) preparing an RNA sample from said T cells,

25 (c) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,

(d) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and

30 (e) comparing the amount of a DNA amplified by said PCR with a control (normal group).

7. The method of claim 6, wherein said PCR is carried out by a PCR amplification monitoring method.

Sub
a2
8. The method of any one of claims 5 to 7, wherein said T cells are prepared from peripheral blood of said subject.

35 9. The method of any one of claims 5 to 8, wherein said allergic disease is a cedar pollen allergy.

10. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal and stimulating with pollen antigen,
- (b) preparing T cells from said model animal,
- (c) preparing an RNA sample from said T cells,
- (d) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,
- (e) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and
- (f) selecting a compound that reduces the amount of said RNA measured in (e), compared to a control (a case where said test compound is not administered).

11. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal and stimulating with pollen antigen,
- (b) preparing T cells from said model animal,
- (c) preparing an RNA sample from said T cells,
- (d) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,
- (e) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and
- (f) selecting a compound that reduces the amount of said DNA amplified in (e), compared to a control (a case where said test compound is not administered).

12. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- (a) administering a test compound to a pollen allergy model animal,
- (b) preparing lymphocytes from said model animal,
- (c) stimulating said lymphocytes with pollen antigen,
- (d) separating T cells from said lymphocytes stimulated with

said antigen,

(e) preparing an RNA sample from said T cells,

(f) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,

5 (g) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and

(h) selecting a compound that reduces the amount of said RNA measured in (g), compared to a control (a case where said test compound is not administered).

10 13. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

(a) administering a test compound to a pollen allergy model animal,

15 (b) preparing lymphocytes from said model animal,

(c) stimulating said lymphocytes with pollen antigen;

(d) separating T cells from said lymphocytes stimulated with said antigen,

(e) preparing an RNA sample from said T cells,

20 (f) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,

(g) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and

25 (h) selecting a compound that reduces the amount of said DNA amplified in (g), compared to a control (a case where said test compound is not administered).

14. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

30 (a) preparing lymphocytes from a pollen allergy model animal or from a human having a pollen allergy,

(b) stimulating said lymphocytes with pollen antigen in the presence of a test compound,

35 (c) separating T cells from said lymphocytes stimulated with said antigen,

(d) preparing an RNA sample from said T cells,

(e) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,

(f) measuring the amount of RNA that is derived from said T cells and that hybridizes with said DNA, and

5 (g) selecting a compound that reduces the amount of said RNA measured in (f), compared to a control (a case where said test compound is not administered).

15. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

(a) preparing lymphocytes from a pollen allergy model animal or from a human having a pollen allergy,

(b) stimulating said lymphocytes with pollen antigen in the presence of a test compound,

15 (c) separating T cells from said lymphocytes stimulated with said antigen,

(d) preparing an RNA sample from said T cells,

(e) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,

20 (f) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and

(g) selecting a compound that reduces the amount of said DNA amplified in (f), compared to a control (a case where said test compound is not administered).

25 16. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

(a) stimulating a T-cell line with a lymphocyte-stimulating substance in the presence of a test compound,

30 (b) preparing an RNA sample from said stimulated T-cell line,

(c) conducting hybridization with said RNA sample using the DNA of claim 3 as probe, wherein said DNA is labeled,

(d) measuring the amount of RNA that is derived from said T-cell line and that hybridizes with said DNA, and

35 (e) selecting a compound that reduces the amount of said RNA measured in (d), compared to a control (a case where said test

compound is not administered).

17. A method for screening for a candidate compound for a therapeutic drug for an allergic disease, said method comprising the steps of:

- 5 (a) stimulating a T-cell line with a lymphocyte-stimulating substance in the presence of a test compound,
- (b) preparing an RNA sample from said stimulated T-cell line,
- (c) synthesizing cDNA by conducting reverse transcription reaction with said RNA sample,
- 10 (d) conducting polymerase chain reaction (PCR) using said cDNA as template and the DNA of claim 3 as primer, and
- (e) selecting a compound that reduces the amount of said DNA amplified in (d), compared to a control (a case where said test compound is not administered).

15 18. The method of claim 10 or 11, wherein said T cells are prepared from peripheral blood of said pollen allergy model animal.

19. The method of any one of claims 12 to 15, wherein said lymphocytes are prepared from peripheral blood.

20 20. The method of any one of claims 10 to 19, wherein said allergic disease is a cedar pollen allergy.